

601-8D DUPLEX LOUDSPEAKER SYSTEM



DESCRIPTION

The ALTEC 601-8D Duplex Loudspeaker System is a two-way loudspeaker with high- and low-frequency speakers coaxially mounted in a single frame. The dual magnet structures allow each speaker to be magnetically, electrically and mechanically independent. Coaxial driver arrangement also provides the effect of an integrated source of full-range sound. All frequencies are propagated through a common 'window' to ensure good stereo imagery when multiple 601-8D's are used.

The high-frequency section has a voice coil of edge-wound aluminum ribbon attached to an

aluminum diaphragm and loaded with a sturdy exponentially expanded multicellular horn. The low-frequency cone is driven by a voice coil of edge-wound aluminum ribbon, and is supported by a high-compliance cloth surround.

The 601-8D is a fine loudspeaker for general-purpose sound reproduction applications. It is designed to operate in enclosures as small as 2.5 cubic feet, and its relatively small physical size permits excellent wide-range performance in environments which would otherwise utilize lower quality, single-driver speakers.

SPECIFICATIONS

Type:	Duplex coaxial loudspeaker system with dividing network	Frame:	Structurally reinforced die-cast aluminum
Power Rating:	40 watts of continuous pink noise (20-20,000 Hz)	Dividing Network (furnished):	Dual full section with 3000 Hz crossover frequency, 12 dB/octave slope and continuously variable HF shelving control with 10 dB range
Frequency Response:	30 to 20,000 Hz in appropriate enclosure	Dimensions:	12 $\frac{1}{8}$ " (30.8 cm) diameter 5 $\frac{5}{8}$ " (14.3 cm) deep
Pressure Sensitivity:	99 dB SPL at 4' measured on axis with 1 watt input of pink noise band-limited from 500 to 3000 Hz with speaker mounted in 614D enclosure	Finish:	Gray enamel
Impedance:	8 ohms	Mounting Data —	
Nominal Free-Air LF Cone Resonance:	39 Hz	Baffle Opening:	11 $\frac{1}{8}$ " (28.3 cm) (front or rear mount)
Distribution Pattern:	40°V x 90°H	Mounting Bolt Centers:	8 or 4 bolts equally spaced on 11 $\frac{1}{8}$ " (29.4 cm) diameter circle
Voice Coils —		Recommended Enclosure:	ALTEC 614D Speaker Cabinet
LF:	3" diameter, edge-wound aluminum ribbon	Shipping Weight:	18 pounds (8.2 kg)
HF:	$\frac{3}{4}$ " diameter, edge-wound aluminum ribbon	Actual Weight:	15 pounds (6.8 kg) (includes dividing network)
Magnets —			
LF:	Alnico, 1.8 pounds, 10,400 gauss flux density		
HF:	Alnico, 0.188 pound, 10,000 gauss flux density		

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The loudspeaker system shall be a two-way coaxial, with a separate magnet structure for each section and a dual full-section dividing network. The HF section shall have an aluminum diaphragm and shall be loaded with an exponentially expanded multicellular horn. The loudspeaker system shall meet the following criteria. Power rating, 40 watts of continuous pink noise band-limited from 20-20,000 Hz. Frequency response, 30-20,000 Hz. Pressure sensitivity, 99 dB SPL at 4' when measured on axis in enclosure with 1 watt input of pink noise band-limited from 500-3000 Hz. Impedance, 8 ohms. Nominal free-air

LF cone resonance, 39 Hz. Distribution pattern, 40°V x 90°H. Crossover frequency, 3000 Hz with 12 dB/octave slope. Voice coils; 3" diameter of edge-wound aluminum ribbon (LF), $\frac{3}{4}$ " diameter of edge-wound aluminum ribbon (HF). Magnets; Alnico, 1.8 pounds (LF), 0.188 pound (HF). Flux density, 10,400 gauss (LF), 10,000 gauss (HF). Dimensions, 12 $\frac{1}{8}$ " diameter x 5 $\frac{5}{8}$ " deep. Weight, 15 pounds.

The loudspeaker system shall be the ALTEC Model 601-8D.



1515 SOUTH MANCHESTER AVENUE, ANAHEIM, CALIFORNIA 92803